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RAILROAD COMMISSION OF TEXAS

OFFICE OF GENERAL COUNSEL

RULE 37 CASE NO. 0267227 District 09

APPLICATION OF CHESAPEAKE OPERATING, INC., FOR A RULE 37 EXCEPTION FOR THE CJD LEASE, WELL NO. 2H, NEWARK, EAST (BARNETT SHALE) FIELD, TARRANT COUNTY, TEXAS

APPEARANCES:

FOR APPLICANT:

APPLICANT:

Glenn E. Johnson

Ray Oujesky

David C. Triana

Bill G. Spencer

Alan Jackson

Steve Mills

FOR PROTESTANT:

Brian Boerner

PROTESTANT:

Cheryl D. Parker

Cheryl D. Parker

Chesapeake Operating, Inc.

PROPOSAL FOR DECISION

PROCEDURAL HISTORY

DATE APPLICATION FILED:

DATE OF NOTICE OF HEARING:

DATE OF HEARING:

HEARD BY:

June 28, 2011

October 20, 2011

November 18, 2011

James M. Doherty, Hearings Examiner

Andres J. Trevino, Technical Examiner

December 5, 2011

January 17, 2012

DATE TRANSCRIPT RECEIVED:

DATE PFD CIRCULATED:

STATEMENT OF THE CASE

In Rule 37 Case No. 0267227, Chesapeake Operating, Inc. ("Chesapeake"), seeks an amended permit pursuant to the provisions of Statewide Rule 37 for the as-drilled location of the CJD Lease Well No. 2H, Newark, East (Barnett Shale) Field, Tarrant County, Texas. An original drilling permit for the CJD #2H was approved administratively on August 20, 2010. The well originally was permitted on a pooled unit having 258.86 perimeter acres and 233.34 leased acres. As originally permitted, the well had a lateral from penetration point to bottom hole location of about 5,450 feet. The drainhole originally permitted, from first to last perforation, was about 4,500 feet, subject to about 3,100 feet of no perforation zones.

Four days after the issuance of the original permit for the CJD #2H, on August 24, 2010, Chesapeake filed a Form W-1 seeking an amended permit for the well, which was approved administratively on February 10, 2011. This first amended permit authorized a lateral from penetration point to bottom hole location of about 5,100 feet and a drainhole from first to last perforation of about 5,050 feet.

The CJD #2H was drilled and completed on October 11, 2010. The well was fracture stimulated and produced for a period of about five days during May-June 2011. However, the amended permit for the CJD #2H issued on February 10, 2011, was issued without notice to Cheryl D. Parker, the owner of an unleased tract within 227 feet of the well. The Parker tract was shown on the plat associated with the W-1 submitted on August 24, 2010, as a leased tract whereas it should have been shown as unleased. According to Chesapeake's regulatory consultant, when this mistake was discovered, the CJD #2H was shut-in and the present application was filed in order to provide proper notice to Ms. Parker.

The present application seeks a second amended permit for the as-drilled location of the CJD #2H. By the time this well was drilled, Chesapeake had learned from drilling a nearby well and from seismic data that the location of a regional fault prevented drilling the long laterals described in the original and first amended permits for the well. Consequently, a much shorter lateral was drilled and the size of the CJD unit was adjusted. A plat showing the amended unit and as-drilled location of the CJD #2H is attached to the proposal for decision as Appendix 1. The well is now proposed to be permitted on a unit containing 183.78 acres within its perimeter, of which 166.98 acres are leased. Chesapeake has an agreement in principle with ExxonMobil Corporation to acquire an additional 10.1 acres within the perimeter of the CJD unit. The as-drilled and completed drainhole of the CJD #2H is about 2,557 feet in length. The Chesapeake application is protested by Cheryl D. Parker, the owner of an unleased 0.30-acre tract of land within 227 feet of the CJD #2H.

Rule 37 Case No. 0267227 was heard on November 18, 2011, jointly with Rule 37 Case No. 0269976; *Application of Chesapeake Operating, Inc. for A Rule 37 Exception for the CJD Lease, Well No. 3H, Newark, East (Barnett Shale) Field, Tarrant County, Texas.* A separate proposal for decision is being issued in Rule 37 Case No. 0269976.

DISCUSSION OF THE EVIDENCE

Chesapeake

Chesapeake requires a Rule 37 exception for the as-drilled location of the CJD #2H because the perforated section of the drainhole is closer than allowed by the applicable well spacing rule to tracts internal to the CJD unit that have unleased interests. Special field rules for the Newark, East (Barnett Shale) Field provide for 330 foot lease line spacing. As to horizontal wells, where the horizontal portion of the well is cased and cemented back above the top of the Barnett Shale formation, the distance to any property line, lease line, or subdivision line is calculated based on the distance to the nearest perforation in the well, and not based on the penetration point or terminus.

A gamma ray log for a pilot well drilled by Chesapeake about 1.5 miles southeast of the CJD #2H shows that in this area, the top of the Barnett Shale formation is at a true vertical depth of 7,700 feet. A Chesapeake geologist presented a gross isopach map demonstrating that the thickness of the Barnett Shale formation in the area of the CJD unit is about 337 feet. According to Chesapeake's geologist, the Barnett Shale is present and productive throughout the CJD unit. Ms. Parker questioned Chesapeake's geologist about a possible connection between gas well drilling and soil subsidence on her property, but the geologist did not believe that boring a 8 3/4" hole for a horizontal well at a depth of more than 7,000 feet could be the cause of any surface or near-surface subsidence.¹

A Chesapeake reservoir engineer presented a plot of estimated ultimate recovery versus drainhole length for 635 producing Barnett Shale wells operated by Chesapeake "across the play." A computer generated least squares regression of the data points on the plot developed a line through the data points with a positive slope of 0.8449 and an intercept of 965.71. The implication of this plot is that a horizontal well in the Barnett Shale ultimately will recover 845 MCF of gas per foot of drainhole plus 965.71 MMCF.

Chesapeake's reservoir engineer also volumetrically calculated original gas in place beneath Chesapeake's leased acreage in the CJD unit and estimated current recoverable gas beneath the unit assuming a 45% recovery factor. Gas in place beneath the 166.980 leased acres in the CJD unit is 34.787 BCF. Chesapeake believes that a 45% recovery factor is reasonable based on its analysis of original gas in place and estimated ultimate recoveries for wells on three nearby units that are fully developed with horizontal wells spaced 500 feet apart. Assuming a 45% recovery factor, the original recoverable gas beneath the 166.980 leased acres in the CJD unit was 15.654 BCF. The CJD #1H

¹ Chesapeake also presented evidence of a March 4, 2011, report from Freese and Nichols to the City of Arlington that resulted from monitoring of surface vibration at natural gas well sites. According to Chesapeake, this report concluded that gas well fracturing had no potential for increased damage to surface infrastructure, for example, no greater impact on surface infrastructure than that normally associated with ambient vibrations that occur in the area. Although questioned on the subject by Ms. Parker, Chesapeake's Manager of Regulatory Affairs - Barnett Shale was unaware of any correlation between gas well drilling activity and recent earthquakes in Arkansas, Oklahoma, and Texas.

has produced 0.222 BCF, and the CJD #2H produced 0.027 BCF before it was shut-in. Thus, Chesapeake estimates that the current recoverable gas beneath the CJD unit leased acreage is 15.405 BCF.²

According to Chesapeake's reservoir engineer, decline curve analysis shows that the CJD #1H ultimately will recover 4.171 BCF of gas. Because current recoverable gas beneath Chesapeake's leased acreage within the perimeter of the CJD unit is 15.405 BCF, additional wells, including the CJD #2H, will be needed to recover 11.234 BCF³ of recoverable gas beneath the unit.

If the CJD #2H were required to be no perforation zone restricted opposite all unleased tracts that are closer to the well than 330 feet, only 1,120 feet of the drainhole could be perforated. Whereas the CJD #2H will recover about 3,126 MMCF of gas if the entire 2,557 feet of drainhole can be perforated, 1,912 MMCF could be recovered if only 1,120 feet of drainhole could be perforated. With the no perforation zones required to make the CJD #2H "regular" to all unleased tracts closer to the well than 330 feet, about 1,214 MMCF of recoverable gas would go unrecovered.

If the CJD #2H were required to be no perforation zone restricted opposite just Ms. Parker's unleased tract within 330 feet of the well, only 2,073 feet of drainhole could be perforated, as compared to the 2,557 feet of drainhole that could be perforated were there no such restriction. If only 2,073 feet of drainhole were perforated, 2,717 MMCF of gas could be recovered, as compared to 3,126 MMCF that would be recovered without the no perforation zone restriction opposite Ms. Parker's tract. With the NPZ opposite Ms. Parker's tract, 409 MMCF of recoverable gas would go unrecovered.

Chesapeake argues that approval of the requested Rule 37 exception is necessary to prevent confiscation, that is, necessary to provide Chesapeake and its lessors with an opportunity to recover their fair share of gas measured by the current recoverable gas beneath Chesapeake's leased acreage in the CJD unit.

Cheryl D. Parker

Ms. Parker believes that the granting to Chesapeake of a Rule 37 exception for the CJD #2H that would enable the well to drain gas from beneath Ms. Parker's unleased tract without compensation would amount to an unconstitutional taking of Ms. Parker's property. Chesapeake has made offers to lease or purchase Ms. Parker's property, but the amount of money offered has not

² If it is assumed that the ExxonMobil acreage within the unit area is leased or farmed-out to Chesapeake, the leased acreage within the perimeter of the unit is increased to 177.110 acres. Original gas in place for 177.110 acres is 36.898 BCF. Assuming a 45% recovery factor, original recoverable gas in place was 16.604 BCF. The remaining recoverable gas in place for 177.110 acres is 16.355 BCF.

³ 12.184 BCF if the gas beneath the ExxonMobil acreage is acquired by Chesapeake.

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been satisfactory to Ms. Parker. Ms. Parker believes that she has been harassed by representatives of Chesapeake over a period of several years. According to Ms. Parker, one of these representatives suggested to her that if she didn't like Chesapeake's oil and gas activities in the neighborhood she should move. Ms. Parker is willing to consider the sale of her property to Chesapeake, but not on the terms that Chesapeake has offered thus far. Ms. Parker does not believe that Chesapeake has been honest in negotiating for a lease or purchase of her property. Chesapeake did not inform Ms. Parker that it had failed to comply with Statewide Rule 37 by providing Parker with notice of the application for the first amended permit for the CJD #2H filed on August 24, 2010.

Ms. Parker complained further that Chesapeake had placed equipment on her property without her consent and also complained of odors in water and air in her neighborhood that did not exist prior to Chesapeake's activities there. Ms. Parker requests that the Commission deny the Chesapeake application "right now" -- that is, until Chesapeake works out something with Parker that will make her happy.

EXAMINERS' OPINION

An owner of oil and gas is entitled to an opportunity to recover the reserves underlying his tract, and any denial of that opportunity amounts to confiscation. *Atlantic Refining Co. v. Railroad Commission*, 346 S.W.2d 801 (Tex. 1961); *Imperial American Resources Fund, Inc. v. Railroad Commission*, 557 S.W.2d 280 (Tex. 1977). When the subject tract is capable of supporting a regular location, the applicant for a Rule 37 exception based on confiscation must prove that the proposed irregular location is necessary because of surface or subsurface conditions and that the proposed location is reasonable. To do this, the applicant must show that it is not feasible to recover its fair share of hydrocarbons from regular locations.

The examiners are of the opinion that Chesapeake proved that the granting of a Rule 37 exception for the CJD #2H at the proposed location is necessary to prevent confiscation. Chesapeake and its lessors within the CJD unit are entitled to an opportunity to recover their fair share of gas from the reservoir, and their "fair share" is measured by the current recoverable gas beneath the leased acreage in the CJD unit. The evidence shows that the current recoverable gas beneath the 166.980 leased acres within the CJD unit is about 15.405 BCF. The only existing wells on the CJD unit are the CJD #1H, a producing well, and the CJD #2H which has been shut-in since the date Chesapeake recognized that the first amended permit for the well issued on February 10, 2011, was issued without proper Rule 37 notice to Cheryl D. Parker.

A decline curve analysis performed by Chesapeake showed that the CJD #1H ultimately will recover about 4.171 BCF of gas. This leaves 11.234 BCF of current recoverable gas to be recovered by additional wells on the CJD unit. Because of the configuration of the unit and the location of the remaining unleased tracts internal to the unit, there are no regular locations where a feasible horizontal well might be drilled that would enable Chesapeake and its lessors to recover their fair share of gas. The CJD #2H could, of course, be burdened with "no perforation zone" restrictions to make the well "regular" to all surrounding mineral property lines, but such a restricted well would not afford Chesapeake and its lessors an opportunity to recover their fair share.

If the requested Rule 37 exception is granted, the CJD #2H will have a drainhole of about 2,557 feet that can be perforated and will recover about 3,126 MMCF of gas based on Chesapeake's Exhibit No. 6-2H plot of estimated ultimate recovery versus drainhole length for 635 producing Barnett Shale wells. To make the CJD #2H "regular" to all surrounding mineral property lines would require that no perforation zones be established along the drainhole such that only 1,120 feet of drainhole could be perforated. This restricted well could be expected to recover no more than about 1,912 MMCF of gas. A total of 1,214 MMCF of gas would be left unrecovered by this restricted well. Because a combination of the CJD #1H and an *unrestricted* CJD #2H will recover only about 7.270 BCF as compared to Chesapeake's and its lessors' fair share of 15.405 BCF, it is evident that burdening the CJD #2H with no perforation zone restrictions such that it is "regular" to all surrounding mineral property lines would not serve to prevent confiscation of Chesapeake's minerals and those of its lessors.

The examiners have considered the correlative rights of Cheryl D. Parker associated with her mineral interest in her 0.30-acre tract of land which is about 227 feet from the CJD #2H.⁴ Ms. Parker's correlative rights in this residential tract of land must be weighed against the correlative rights of all surrounding mineral owners who have agreed to lease to Chesapeake and are entitled to have their minerals developed. There is no evidence in the record as to the precise amount of gas beneath Ms. Parker's 0.30-acre tract, but it must be assumed that it is a fraction of the 409 MMCF of gas that would go unrecovered if the CJD #2H were no perforation zone restricted around the Parker tract.

The evidence suggests that Ms. Parker has had a chance, and may still have a chance, to lease to Chesapeake and be compensated with royalties on production of any well on the CJD unit. Ms. Parker has the right *not* to lease if she is dissatisfied with the terms offered by Chesapeake, but the decision not to lease has consequences. The Commission has no authority to order the parties to enter into a private agreement relating to oil and gas property or to condition disposition of a Rule 37 application on any such private agreement.

The granting of a Rule 37 exception for the CJD #2H as necessary to prevent the legal confiscation of Chesapeake's gas and that of its lessors is not unconstitutional simply because the well may be able to produce some amount of gas from beneath the Parker tract. Under the rule of capture, a cornerstone of the oil and gas industry fundamental both to property rights and to state regulation, a mineral rights owner owns the oil and gas produced from his or her well even if the oil and gas migrated underground from a tract owned by someone else. *Coastal Oil & Gas Corp. v. Garza Energy Trust*, 268 S.W.3d 1, 13 (Tex. 2008).

The examiners do not condone the drilling, completion, and production of the CJD #2H without a valid drilling permit. The well was drilled and completed with perforations in a manner not authorized by the original drilling permit issued for the well on August 20, 2010. The first

⁴ Ms. Parker also owns a second tract of land within the perimeter of the CJD unit, but this second tract is beyond a Rule 37 distance from the CJD #2H or the area likely to be drained by the well which is said by Chesapeake to be about 250-300 feet on either side of the horizontal lateral.

amended permit for the well issued on February 10, 2011, was void *ab initio* because Chesapeake did not provide Rule 37 notice to Cheryl D. Parker, the owner of an unleased tract within 330 feet of the CJD #2H drainhole. The record does not include any evidence to show why the plat submitted by Chesapeake with the Form W-1 application for the first amended permit for the CJD #2H showed the Parker tract as leased rather than unleased.

On the other hand, the examiners cannot determine that Chesapeake obtained any material advantage by failing to provide Ms. Parker with the required Rule 37 notice of the application for the first amended permit. When this failure of notice was discovered, the CJD #2H was shut-in after only a few days of production and has remained shut-in pending the outcome of the present Rule 37 case. Notice and opportunity for hearing have been provided to Ms. Parker in the present Rule 37 case. There is substantial doubt that the Commission could decline to approve the present application for a second amended permit for the CJD #2H simply on the ground that Chesapeake obtained the first amended permit for the well in violation of Statewide Rule 37 and drilled and completed the well without a lawful permit. *Harrington v. Railroad Commission of Texas*, 375 S.W.2d 892, 894 (Tex. 1964).

The examiners are of the opinion that the location of the CJD #2H is reasonable. There is no regular location on the unit where a comparable horizontal well might be drilled. There is no less irregular location that would be more reasonable. The well does not unreasonably crowd unleased tracts internal to the unit given the between well spacing that must be observed in order to avoid interference between the CJD #2H and the additional horizontal wells that will be needed to fully develop the unit and provide Chesapeake and its lessors with an opportunity to recover their fair share of gas.

Based on the record in this case, the examiners recommend adoption of the following Findings of Fact and Conclusions of Law.

FINDINGS OF FACT

- 1. At least ten (10) days notice of this hearing was provided to all affected persons as defined by Statewide Rule 37(a)(2) and 37(a)(3) and the special field rules for the Newark, East (Barnett Shale) Field.
- 2. Chesapeake Operating, Inc. ("Chesapeake") seeks an exception to Statewide Rule 37 for the as-drilled location of the CJD Lease, Well No. 2H, Newark, East (Barnett Shale) Field, Tarrant County, Texas.
- 3. An original drilling permit for the CJD #2H was approved administratively on August 20, 2010. The well originally was permitted on a pooled unit having 258.86 perimeter acres and 233.34 leased acres. As originally permitted, the well had a lateral from penetration point to bottom hole location of about 5,450 feet. The drainhole originally permitted, from first to last perforation, was about 4,500 feet, subject to about 3,100 feet of no perforation zones.

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- 4. Four days after the issuance of the original permit for the CJD #2H, on August 24, 2010, Chesapeake filed a Form W-1 (Application for Permit to Drill, Recomplete, or Re-Enter) seeking an amended permit for the well, which was approved administratively on February 10, 2011. This first amended permit authorized a lateral from penetration point to bottom hole location of about 5,100 feet and a drainhole from first to last perforation of about 5,050 feet.
- 5. The CJD #2H was drilled and completed on October 11, 2010. The well was fracture stimulated and produced for a period of about five days during May-June 2011.
- 6. The first amended permit for the CJD #2H issued on February 10, 2011, was issued without notice to Cheryl D. Parker, the owner of an unleased tract within 227 feet of the well. The Parker tract was shown on the plat associated with the W-1 submitted on August 24, 2010, as a leased tract whereas it should have been shown as unleased. According to Chesapeake's regulatory consultant, when this mistake was discovered, the CJD #2H was shut-in and the present application was filed in order to provide proper notice to Ms. Parker.
- 7. The present application seeks a second amended permit for the as-drilled location of the CJD #2H. By the time this well was drilled, Chesapeake had learned from drilling a nearby well and from seismic data that the location of a regional fault prevented drilling the long laterals described in the original and first amended permits for the well. Consequently, a much shorter lateral was drilled, and the size of the CJD unit was adjusted. A plat showing the amended unit and as-drilled location of the CJD #2H is attached to the proposal for decision as Appendix 1, which is incorporated into this finding by reference.
 - a. The well is now proposed to be permitted on a unit containing 183.78 acres within its perimeter, of which 166.98 acres are leased by Chesapeake.
 - b. Chesapeake has an agreement in principle with ExxonMobil Corporation to acquire an additional 10.1 acres within the perimeter of the CJD unit.
 - c. The as-drilled and completed drainhole of the CJD #2H is about 2,557 feet in length.
- 8. The as-drilled location of the CJD #2H is within the City of Kennedale. The surface location of the well is off lease, 490 feet from the north line and 640 feet from the east line of the Renfro, J. B. Survey, A-1260, Tarrant County, Texas. The penetration point location is 187.8 feet from the east line and 491.4 feet from the south line of the CJD pooled unit. The terminus location is 485.6 feet from the north line and 729.1 feet from the west line of the CJD pooled unit and 30 feet from the east line and 491.4 feet from the south line of the Mingus, E. R. Survey, A-1114, Tarrant County, Texas. According to the Form W-1, the distance from the well to the nearest lease line is 80.1 feet.
- 9. The Chesapeake application is protested by Cheryl D. Parker, the owner of an unleased 0.30-acre tract of land within 227 feet of the CJD #2H.

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- 10. As pertinent to this case, special field rules for the Newark, East (Barnett Shale) Field provide for 330 foot lease line spacing. As to horizontal wells, where the horizontal portion of the well is cased and cemented back above the top of the Barnett Shale formation, the distance to any property line, lease line, or subdivision line is calculated based on the distance to the nearest perforation in the well, and not based on the penetration point or terminus.
- 11. A Rule 37 exception is needed for the as-drilled location of the CJD #2H because the section of the drainhole that has been perforated is closer than 330 feet to the external unit boundary and tracts internal to the unit that have unleased interests.
- 12. Chesapeake has attempted to lease or purchase the tract of land owned by Cheryl D. Parker which is within 227 feet of the CJD #2H, but the parties have not agreed on a lease or purchase consideration.
- 13. The CJD #2H is the second Barnett Shale gas well on the CJD unit. The CJD #1H is currently producing. The CJD #2H has been shut-in since Chesapeake discovered its failure to provide Cheryl D. Parker with notice of the application for the first amended permit for the well. Chesapeake also proposes to drill the CJD #3H to the west of the CJD #2H. Chesapeake's application for a second amended drilling permit for the CJD #3H was heard jointly with its application for a second amended drilling permit for the CJD #2H.
- 14. The Barnett Shale formation is present and productive under the entirety of the CJD unit. The formation is about 337 feet thick in the area of this unit.
- Based on a plot of estimated ultimate recoveries versus drainhole length for 635 producing Barnett Shale wells operated by Chesapeake across the Barnett Shale play, Chesapeake estimates that a horizontal well in the Barnett Shale will recover 845 MCF per foot of drainhole plus the plot's intercept of 965.71 MMCF. On this basis, the CJD #2H is expected to have an ultimate recovery of 3,126 MMCF of gas.
- 16. Volumetrically calculated gas in place beneath the 166.980 leased acres in the CJD unit is 34.787 BCF.
- 17. Chesapeake believes that a 45% recovery factor is reasonable based on its analysis of original gas in place and estimated ultimate recoveries for wells on three nearby units that are fully developed with horizontal wells spaced 500 feet apart.
- 18. Assuming a 45% recovery factor, the original recoverable gas beneath the 166.980 leased acres in the CJD unit was 15.654 BCF. The CJD #1H has produced 0.222 BCF and the CJD #2H produced 0.027 BCF before it was shut-in. Thus, the current recoverable gas beneath the CJD unit leased acreage is about 15.405 BCF.

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- 19. Decline curve analysis shows that the CJD #1H ultimately will recover 4.171 BCF of gas. Because current recoverable gas beneath Chesapeake's leased acreage within the perimeter of the CJD unit is 15.405 BCF, additional wells, including the CJD #2H, will be needed to recover 11.234 BCF of recoverable gas beneath the unit.
- 20. Because of the configuration of the unit and the location of the unleased tracts internal to the unit, there are no regular locations on the unit where a feasible horizontal well might be drilled that would enable Chesapeake and its lessors to recover their fair share of gas.
- 21. The CJD #2H could be burdened with "no perforation zone" restrictions to make the well "regular" to all surrounding mineral property lines, but such a restricted well would not afford Chesapeake and its lessors an opportunity to recover their fair share of gas.
 - a. If the requested Rule 37 exception is granted, the CJD #2H will have a drainhole of about 2,557 feet that can be perforated and will recover about 3,126 MMCF of gas based on Chesapeake's Exhibit No. 6-2H plot of estimated ultimate recovery versus drainhole length for 635 producing Barnett Shale wells.
 - b. To make the CJD #2H "regular" to all surrounding mineral property lines would require that no perforation zones be established along the drainhole such that only 1,120 feet of drainhole could be perforated. This restricted well could be expected to recover no more than about 1,912 MMCF of gas. A total of 1,214 MMCF of gas would be left unrecovered by this restricted well, as compared to the recovery of the fully perforated well.
 - c. Because a combination of the CJD #1H and an *unrestricted* CJD #2H will recover only about 7.270 BCF as compared to Chesapeake's and its lessors' fair share of 15.405 BCF, burdening the CJD #2H with no perforation zone restrictions such that it is "regular" to all surrounding mineral property lines would not provide Chesapeake and its lessors with an opportunity to recover their fair share of gas.
- 22. The as-drilled location of the CJD #2H is reasonable. There is no regular location on the unit where a comparable horizontal well might be drilled. There is no less irregular location that would be more reasonable. The well does not unreasonably crowd unleased tracts internal to the unit given the between well spacing that must be observed in order to avoid interference between the CJD #2H and the additional horizontal wells that will be needed to fully develop the unit and provide Chesapeake and its lessors with an opportunity to recover their fair share of gas.
- Burdening the CJD #2H with a no perforation zone opposite the Cheryl D. Parker tract would not be more reasonable than the as-drilled and completed location and would not provide Chesapeake and its lessors with the same opportunity to recover their fair share of gas.

- a. If the CJD #2H were required to be no perforation zone restricted opposite just Ms. Parker's tract, so that the well could not be perforated within 330 feet of the Parker tract, only 2,073 feet of drainhole could be perforated, as compared to the 2,557 feet of drainhole that could be perforated were there no such restriction.
- b. If only 2,073 feet of drainhole were perforated, 2,717 MMCF of gas could be recovered, as compared to 3,126 MMCF that would be recovered without the no perforation zone restriction opposite Ms. Parker's tract.
- c. With an NPZ opposite Ms. Parker's tract, 409 MMCF of recoverable gas would go unrecovered.

CONCLUSIONS OF LAW

- 1. Proper notice of hearing was timely issued by the Railroad Commission to appropriate persons legally entitled to notice.
- 2. All things necessary to the Commission attaining jurisdiction over the subject matter and the parties in this hearing have been performed.
- 3. Approval of a Rule 37 exception for the as-drilled location of the CJD Lease, Well No. 2H, Newark, East (Barnett Shale) Field, Tarrant County, Texas, is necessary to prevent confiscation and protect the correlative rights of mineral owners.

RECOMMENDATION

The examiners recommend that the application of Chesapeake Operating, Inc., for a Rule 37 exception for the as-drilled location of the CJD Lease, Well No. 2H in the Newark, East (Barnett Shale) Field, Tarrant County, Texas, be granted as necessary to prevent confiscation and protect correlative rights.

Respectfully submitted,

James M. Doherty

Hearings Examiner

Andres J. Trevino Technical Examiner